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John Roussel, Assistant Secretary

Comments

It is no secret that Louisiana is blessed with abundant fisheries, but few citizens or avid anglers realize just how many excellent and even world-class recreational and commercial fisheries exist in our state. For the father and son working the shoreline of Caddo Lake the very next strike may be a 15-pound bass. The group of friends trolling a blue water rip may, at any minute, be hooked up with a 500-pound blue marlin or 200-pound yellowfin tuna. Menhaden boats routinely harvest 1,000 million pounds of menhaden, year after year. More than 15,000 commercial fishermen support their families by harvesting nature's gifts: crawfish, crabs, lakerunners, stripers, redfish, red snapper, oysters, river shrimp and gar. How many states can brag of such diversity and abundance? Most people are familiar with what is in their own backyards, but this state's combined resources make us arguably the richest fisheries state in the nation.

How do we sustain these treasures and still optimize their potentials? Wise, fair management. It sounds simple, but what does that really mean? *Your* Department of Wildlife and Fisheries strives to collect and assimilate the best information available on all these popular and valuable species and many more. We monitor growth patterns, habitat, fishing pressure and other parameters. We assimilate the latest stock assessments and studies and collect vast amounts of fisheries dependent and independent data from all freshwater districts and estuarine basins throughout the state. We prepare biologically sound fisheries management plans and coordinate with other states and the federal government on managing inter-jurisdictional fisheries. Recommendations and information necessary for intelligent decisions are given to the Wildlife and Fisheries Commission, the Legislature and the Governor on whose shoulders rest the awesome responsibility of creating fair limits, laws and seasons. We field some of the finest and most dedicated fisheries professionals and enforcement agents in the country, and the result is what we have in Louisiana today, a fishing paradise second to none.

This sounds great, but can it last? It can if we always collect and use the best information available as our basis for making decisions. As more people discover our resources, great care must be taken not to overharvest or to destroy the habitats on which these fish populations depend. Weather conditions, land use patterns and harvest pressure can all have profound influences on these resources. This agency must have the means available to assess these changes promptly and to remain responsive if we are to properly fulfill our mission.

Your conservation agency is charged with protecting the interests of 4.2 million people and has been funded for almost a century primarily by direct user groups. That means commercial and recreational fishermen, hunters and trappers. Their support has been unwavering, and we are proud of the record of success resulting from that support. We stand now at a crossroads. Hopefully, the traditional financial support base for fish and wildlife conservation will soon be expanded. The additional funding is sorely needed. The continued health of our renowned fisheries and the wise and effective management necessary to perpetuate those fisheries cannot exist without your support.

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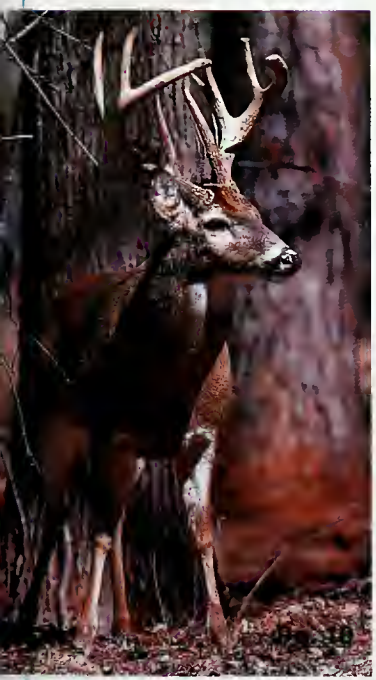

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By Gary Kramer

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Archery season has arrived.
By Soc Clay

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Duck Hunting

Down the River

BY PETE COOPER JR.

I learned three particulars while I was struggling to obtain a degree at LSU some 30 years ago and none of them were listed in the school's curriculum. The enlightenment came because I cut so many classes to hunt ducks — and made my first hunts on the Mississippi River Delta.

The first was the realization there were more ducks in the Delta than I imagined even existed while I hunted my high-school haunts on Caddo and Wallace lakes in north Louisiana and cut Fine Arts 1 and Economics 51 to hunt the pits off Two O'Clock Bayou and the once-upon-a-time wilds of Devil's Swamp near Baton Rouge. The second was that there was a marked difference in the taste of the gumbo I intentionally ate and the real Louisiana gumbo — the bottomless goop covering much of the Delta which I slogged through, pushing my decoy-laden pirogue on abominably-low tides to reach and depart my blind. And that led to the third: no matter what time of the day it was, or what the weather was like, one should do his utmost to hunt the high tides.

I ate a lot of the wrong type of gumbo over the years, fighting the low-tide mud flats to utter exhaustion. And I shot a lot of ducks — and thought I was doing it the right way — before I learned better. Yeah, I know it's tough on opening morning, even if a screaming norther is pushing all the water in the Delta towards Cuba, to refrain, wait until afternoon when the tide begins to rise — if you are allowed to hunt in the evenings and then make your pass at them. But it's sure a lot easier on the bones as you get older — and you will have a much better hunt.

Some years ago I made a switch-willow blind on a long, narrow point — elephant ears and duck potato — that extended out into a large bay. It was almost totally inaccessible on low tides, but on the evening's higher tides — or when the southerlies drove the water in — it was super. A buddy and I set our spread by one on a warm, partly-cloudy December afternoon with the wind set in the southeast and the water in the blind, picked the drake pintails as they came — and left with our limits of 10 before 3 p.m.

Several years later and well into the season's second split — with a very high river and a cold, persistent, stiff nor'easter which held the tide up, I never left the house before 10:30 a.m., never returned later than 3 p.m. and had my limit of three drake pintails and a widgeon on eight consecutive hunts.

On a particular 28-degree afternoon the day before the season closed and with the marsh drained dry by the northern gale, I set a half-dozen poule d'eau decoys, a half-dozen canvasbacks, and a pair of pintails in a canal beside a stand of roseaus. I hid in the canes, took my can, a greenhead, and a drake pintail, and almost froze my beard off on the long run back to Venice. Was it worth it? You'd better believe it!

Those are only a few of the many memorable hunts I have had the fortune of making in the Mississippi River Delta. Some of those which I recall with the fondest of memories were when the limit was only three: when the birds work to you, it doesn't take many to make a great day — like when Barbara got her first — and Daddy's last hunt with me. Then there were — excuse me, but I'm saying it anyway — the "too-many-years"; the paucity which was brought about not only by the previous 10-per-day limits but a severe drought on the breeding grounds. Now, that has been tempered by a lot of medicinal moisture, long-range planning by state and federal biologists, Ducks Unlimited, and better land management practices. The birds, most species anyway, are back, but some are not "out of the woods" yet.

When you sit in your blind on opening morning, or whenever, it may be hard to envision the long and troublesome story behind that certain flight of approaching pintails. I have, but only because I have witnessed them — or their ancestors — for so long. Others — gadwalls, for instance — are much better off now than their long, white-necked kin which are still badly hurting from problems up north — and the 10-duck limits of years ago down here. I've seen them in recent seasons — whistled down from high above with cupped wings and lowered feet,

Fighting the low-tide mud flats can be exhausting. A late morning hunt will allow the tide to rise making the hunt much easier.

Photo by Pete Cooper Jr.

oto by Pete Cooper Jr.

Hunting the mud flats of the Mississippi River Delta can be difficult at times. Having a four-legged friend help retrieve the kill makes for a more pleasant hunt.

dropping into the spread — and watching . . . and hoping for their recovery. They are indeed the Delta duck, and we need them back.

But I'll blast a drake widgeon in a heartbeat! After all, it's duck hunting, and the Delta offers that at its best.

If it holds some water . . .

So, with that parameter firmly set for the most enjoyable hunt — and probably most important for overall good shooting — here are a few pointers which have been pounded into my physical and mental being during 30 years of duck hunting down the river.

The first is contradictory to the "crack-of-dawn" conditioning found in many hunters but is essential for someone new to a particular area: take time — burn a little daylight — to set up in the best manner. Sure, you'll miss the daybreak flurry, but in doing so you might also miss shooting a hen pintail by mistake — nothing illegal, to be sure, but something to try to avoid.

Paddle around until you jump some birds, then move to the upwind shoreline of the spot be it bay, pond or broken marsh and look for a thick stand of natural vegetation: plain-vanilla marsh grass, duck potato (during the first split) and elephant ears are best, bulrush and roseau a distant second choice as they form a "wall" against incoming birds — something they don't especially like.

In grass, duck potato or elephant ears, situate yourself back 8 or 10 feet from the edge of the vegetation, then supplement the natural cover with branches from switch willows or wax myrtles. Personally, I wouldn't use cut roseau unless they are absolutely the only alternative. The height of the blind should be high enough to make you hunker down while sitting in your pirogue to look through the tops of the branches, yet low enough as to not interfere with shooting. And if you must use roseau — either standing or cut — do not break them over in front of you; cut them and stick the cut ends into the mud. The tops of roseau cane do not point toward the water in the natural world, and ducks know it!

Decoys should be placed just downwind from the blind-site and set in a funneling fashion to bring the birds into the most favorable position. With the wind directly behind you, you will have the easiest shot, but the birds will be looking right down your throats. That's the reason for setting the blind well back in the natural vegetation, the low blind, and why you look through it, not over the top of it!

The configuration of the spread, and its numbers, can vary a bit, but more is usually better, and some form of "fishhook" or "horseshoe" is almost always best. I use around 40, almost half being poule d'eaus, the rest a mix of teal and pintails and a couple of mallards. The poule d'eaus, teal, and mallards are set closest to the grass; most of the pintails comprise the "legs" of the spread. All that, again, is to create the easiest shot — the shot which will result in fewer lost cripples.

Many of my old-time spots in the Delta are no more — either eroded away by wave action or subsided — and are now only broad expanses of open water. But the Delta builds, too; the other day I noticed a patch of elephant ears near an old blind-site where years ago the duck potato vanished. It's also beginning to come back there now — rebirth. There are a lot of places a guy can hunt down here . . . even places with a hard, wadable bottom.

Much of that is on the Pass-a-Loutre management area. You've probably read a zillion lines about that place — that's because it's so good. All I'll say about it is you should plan a two-day hunt there, camping out overnight. And don't forget the casting rod. Fishing — freshwater and saltwater alike and especially during the first split — is as good as the hunting.

And that can be as good as it gets — if there's any water in the marsh. If there isn't, find a canal — preferably one that's fairly wide and doesn't see much crew-boat use. You may need to lengthen your decoy lines a bit and it will probably seem somewhat strange — hunting in a canal, but I'll guarantee you will learn to love it! That little "no-water" secret goes back more years than I care to admit. Try duck hunting down the river this year. It could very well be the finest you have ever experienced.

The Life & Times of Percy Viosca Jr.

Profile of a Naturalist: Part II

BY ROBERT L. ANCELET AND MARK SCHEXNAYDER

LDWF file photo

CONCEPTS OF CONSERVATION

Percy Viosca had an understanding of fish and the effects of fishing on fish populations sadly lacking in commercial fishermen, sports anglers and environmentalists today. He understood the resiliency of warm water fish populations and fought for legislative changes in fishing regulations. One change he pursued was lifting the "closed season" during the spawning periods of largemouth bass. He knew fish production was more dependent on habitat and availability of food than on the abundance of eggs. He reasoned that if catching fish during spawning periods affects the total volume of eggs produced, then taking fish during any season would have the same effect, because these are the same fish! In fact, it takes very few fish to replenish an area. Also, Viosca knew that fish grow at a tremendous rate early in life only to slow down later. He recognized the benefits of harvesting the oldest and largest specimens, which contribute little to increasing the population while consuming disproportionately large amounts of food. He wrote, "The more fish you catch, the more fish you catch"

Viosca defined modern conservation as the wise use of a natural resource by application of energy to bring about a desired result. He considered any resource not utilized as a loss, "as that which goes down the drain or up in smoke without deriving any benefit therefrom."

To be a dynamic conservationist, one must think in terms of the highest possible sustainable yields. This leads us to Viosca's concepts of fish population dynamics.

His views on conservation and the dynamics of aquatic ecosystems were especially interesting when viewed in light of modern fishery management practices. Fish populations, or stocks, are affected more by nutrients, or the availability of essential elements, than by fishery management techniques. Viosca argued that the *Principle of Limiting Factors*, or *Liebig's Law of the Minimum* limits growth of aquatic populations. An essential substance that is rarest in the environ-

ment will be the limiting factor. Fish populations are limited by food supplies which, in turn, are limited by available nutrient substances. In identifying the limiting nutrient substance, Viosca pointed out that it was usually phosphorus, with nitrogen availability ranking second.

Viosca held that a body of water will only support a finite population of fish once all ecological niches are filled: "Fish populations have a tendency to become balanced, and therefore static, except in newly developed habitats such as those created by a major flood or in newly impounded waters."

We now know that only such environmental changes cause increases in fish populations.

Viosca viewed the stocking of fish in a naturally stabilized population, i.e., a population in environmental equilibrium, as an exercise in futility. He said, "Because of limiting factors, the residual population of each species in any balanced biological association tends to be more or less constant. To attempt to increase this population beyond the biological limits set by nature, by planting more fish, is in itself a disturbance which may derange the biological balance and reduce the very species we wished to increase."

LDWF file photo

This fisherman proudly displays his catch from the gar traps during the "gar wars" of the early 1940s.

With regard to human activity and fish productivity, Viosca had this to say:

"The productivity of an area, as far as human utilization is concerned, should be measured, not by what exists in it, but by what we take out. Seldom can a majority of the game fish in a body of water be taken by angling, because of the automatic increase in their natural food supply which follows removal of these predatory species by the very act of angling. Certainly they cannot be fished out to the point where a shortage of brood stock will occur. Yet, much restrictive legislation seems to be designed to save all of the eggs for restocking an environment which has space and feed for only two fish, and where that space is already occupied by the hungry, and sometimes cannibalistic parents of the brood. We saw that, with prolific species, the ecological conditions were far more important than the number of eggs laid."

In a scientific paper published by the American Fisheries Society in 1943, Viosca described an interesting scenario that usually followed failed fishery management efforts:

"Most of the present findings of fishery biologists seem to discount accepted fish management methods — which have been over-sold to the fishing public ... Throughout the long history of fish culture and management, many explanations have been advanced for the failures to achieve practical results, as measured in terms of angler satisfaction (or shall we say dissatisfaction), by those honest enough to admit failures. Some have stressed lack of restrictions or failure to enforce them; some have stressed pollution or disease; and others have emphasized predation or objectionable vegetation. Lack of hatchery space, efficient help, or transportation facilities have received a fair share of the blame. Most anglers have blamed the commercial fishermen, but the latter have reciprocated by blaming the anglers. Gar and other predators have been under suspicion for a long time, but the latest fad is populations of stunted fish ... thus, there are as many diagnoses as there are diagnosticians, and as many cure-alls as there are sportsman's league members. Laws are passed, restrictions applied, and legitimate and vital commercial fishing operations hampered. Restocking is resorted to, vegetation is raked, the weather is maligned, and the war on gars goes merrily on. Political promises are made, sometimes actually kept, for on the whole, fish management practices when

reduced to the least common denominator are little more than pork-barrel politics."

This description is, unfortunately, strikingly similar to many present-day fisheries management issues in the Gulf of Mexico region.

In the arena of shrimp management, Viosca believed the shrimp fishery could be properly controlled by season closures and mesh size regulations rather than minimum size limits on shrimp and maximum size limits on trawls. In the Louisiana Wildlife and Fisheries Commission, Eighth Biennial Report, 1958-59, he recommended the following: "When a size limit is imposed the basic purpose of the regulation is defeated by culling. Shrimp smaller than the legal size which have been killed in the fishing operation are discarded ...

"No limitations are suggested on size of trawls. We have no evidence that trawling is harmful or beneficial to the bottoms. The criticism that large trawls take an undue quantity of shrimp from inside waters is not sound since it makes no difference to the shrimp population whether or not the shrimp are caught by a large or a small trawl. Competition between units of the fleet is an economic rather than a biological problem. Again we believe that the recommended closed seasons properly enforced should suffice for adequate control. The size of mesh used in a trawl controls to a marked degree the size of shrimp caught. Where enforcement is feasible, mesh regulations are useful."

Percy Viosca Jr. is remembered lovingly by his family and close friends. We professional biologists who never knew him, remember him for other reasons. His words echoing across three decades keep haunting us by reminding us that productivity is that which is utilized; that which is not utilized is lost; too many fishing restrictions cause overpopulation resulting in stunting; stocking of fish in a balanced population is futile; changing the environment by freshwater reintroduction results in a true increase in fish stocks; *Liebig's Law of the Minimum* determines the limits of animal populations; and fish populations have a tendency to become balanced.

If Percy were alive today, we would receive, no doubt, a mixed review of present fishery management in Louisiana. He would be disappointed in the general underutilization of some of our fishery resources, but he would be pleased with the reintroduction of river water into our estuaries and with the oyster fishery management program. Because he considered any resource not utilized as a loss, "as that which goes down the drain or up in smoke without deriving any benefit therefrom", he would find current marine fish management too restrictive and too wasteful.

His scientific contributions in entomology, crustaceology, malacology, herpetology, botany, population dynamics, fisheries science, aquatic ecology and his long record of achievement on behalf of the state indeed make Percy Viosca Jr. Louisiana's most distinguished naturalist.

We are all poorer for his passing.

LDWF file photo

Viosca (holding the fish) at the Beechwood Hatchery in 1930.

From Little Acorns Grow BIG BUCKS

BY DAVID MORELAND AND KENNY RIBBECK

The pickup truck slowed as Joe rounded the curve on the dusty gravel road. It had been over a month since he had last visited his hunting club and he was anxious to do some preseason scouting. As he topped "phone-home hill" he slammed on the brakes, causing the truck to skid sideways on the loose gravel. A sick feeling came upon Joe as he gazed over the open clearcut that once was his favorite deer woods. All that remained was a small strip of trees on each side of Muddy Creek. Upon hearing the approach of another vehicle, Joe eased his truck over to the shoulder of the road. It was the timber company's forester. The forester pulled up alongside Joe and stopped. "When did ya'll cut this?" Joe immediately asked. "We just finished this last week," the forester replied. "Right now we're grading the roads and fixing culverts."

Photo by Joe Mac Hudspeth

"There used to be some big oak trees out there," Joe said. "It was my favorite hunting place. I killed quite a few deer along that ridge that drops down to the creek."

"There's still plenty of deer out there," the forester said. "This time next year that place will be loaded with browse. Browse is what makes deer; they don't need acorns. Get a corn feeder and hang it up out there and that will replace the acorns. I got to go check on another logging crew. See you down the road, Joe!"

Joe gave up on his idea of scouting and drove home somewhat confused. He had always thought that acorns were the main food of deer during the hunting season. When he got home he got his copy of Leonard Rue's *The Deer of North America* off the bookshelf and began reading. There in black and white on page 248 was a statement that said, "In the southern regions of the U.S., acorns when available are the number one white-tail food." Now Joe was really confused. Can deer really get by without oaks and acorns? The remainder of this article will hopefully shed some light on this subject and answer Joe's question.

The main food of white-tailed deer is plant vegetation, stems and leaves of both woody and herbaceous plants. Most biologists generally refer to this as browse, although some refer only to the woody plants as browse while the herbaceous plants are called forbs or weeds. Because of this, deer are usually referred to as browsing animals rather than grazing animals which eat grass and other forage. Deer usually will not eat the spring and summer grasses found in the fields and woods, but they will eat the cereal grains during the winter and early spring. These grasses are very palatable to deer at a time when native vegetation is not readily available. While feeding, deer usually don't stand in one spot but are steadily moving around nipping plant vegetation here and there.

Browse is most abundant during the spring and summer and makes up most of the food that deer eat. At this time of year, the protein content of these plants is high and provides deer with the nutrition needed for body growth and antler development. Toward the end of the summer and during early fall the nutritional value of browse declines. As winter approaches the vast majority of vegetation becomes dormant and is simply not available for deer. Deer will eat woody stems but the food value of winter stems is poor. In a study of penned raised deer (Ozoga and Verme, 1982), researchers found that consumption of pelleted food was greatest during winter when little natural forage was available.

Most individuals think only of acorns when talking about mast. Hardwood mast, however, includes a variety of both nuts and fruit. Hard mast refers to acorns, pecans, chestnuts, etc. Soft mast would refer to fruits such as crabapples, French mulberry drupes, grapes, blackberries, blackgum drupes, etc. Mast, when available in the fall and winter months, does provide deer with high energy food. If mast is abundant deer will have a ready source of food that will help maintain them at a time when native vegetation is low. The importance of mast is dependent upon the availability of these hardwood trees in the habitat.

Table 1 gives the average live weight of male deer on various habitat types for Louisiana's wildlife management areas (wmas). As shown by Table 1, the best weights occur on areas having a high component of hardwood timber. As the hardwood component declines, the weights of deer respond accordingly.

The majority of the state's wmas are forested habitat, most of which have a good hardwood component in the forest. A comparison of male deer weights on our WMA system with the statewide DMAP harvest (Table 2) shows that the weights of deer on the WMA system are somewhat better than on private land. The timber program of our state owned wmas is geared toward the creation of a diverse hardwood forest, with emphasis on wildlife.

State-owned WMAs are managed under a Forest Management Program that emphasizes creation and maintenance of good quality wildlife habitat. Wildlife, from the Louisiana Department

Photo by Jerry Hennen

This photograph shows an example of deer browse. Most biologist refer only to the woody plants as browse, while the herbaceous plants are called forbs or weeds.

Photos by David Moreland

Hardwood mast consist of both nuts and fruit. Some examples of these are nuttail oak acorns (top), persimmons (middle) and mayhaw (bottom).

of Wildlife and Fisheries' (LDWF) standpoint, includes all forms of animal life occupying the land year round, as well as migratory birds which are present at different seasons. Forests are managed to promote diversity of food components and provide sufficient supplies of the different food components (such as browse, mast, deadwood, etc.) to meet the food demands of the varied animal populations.

Maintenance and growth development of the hard mast component is emphasized in the WMA Forest Management Program. Harvesting operations are prescribed and carried out in a manner that will ensure the long term presence of hard mast producers (oaks and pecans) in the forest. Additionally, other mast producers such as persimmon, dogwood, sugarberry, muscadine, etc. are maintained for their seasonal food supplies. This ensures an overall diversity of hardwood tree species which in turn ensures a variety of foods available for wildlife throughout the year.

The mixed-bag of harvest treatments, including small clearcuts, group selection cuts, shelterwood cuts, and individual tree selection cuts, allows the Department's biologists to treat each stand according to its specific needs, much like a doctor treats each patient according to his/her symptoms. Supervised harvesting operations ensure treatments are carried out correctly and that long term food supplies will be there for all animals inhabiting the WMA forest, including man.

The key to the importance of mast is the two words "when available." Even though oaks and other hardwood trees may occur in the habitat, they may or may not produce acorns or fruit. Weather conditions have an important role in mast production. Bad weather, rain or freezing temperatures, during the time when mast trees are flowering will affect pollination and subsequent mast development.

The oak family has two groups: white oaks and red oaks. White oaks flower and set fruit the same year (one growing season). Red oaks on the other hand require two years or growing seasons for acorn maturation. Weather conditions during the time these small acorns are developing can affect the mast crop. Trees that produce other hard and soft mast must also deal with mother nature. Insects are yet another problem associated with mast production.

Many biologists tend to downplay the importance of mast since it may or may not be available from one year to the next. Instead they tend to stress the importance of browse; the fact is however, that in fall and winter browse availability is limited. To compensate for this lack of browse and mast, supplementary feeding and planting are often recommended by these biologists. No doubt feeding and planting will attract deer but unless done on a large scale, their overall benefit to the herd may not be much. One thing is certain, corn isn't used as much by deer when acorns are readily available.

To remedy the need for feeding and plantings, timber management which favors maintaining this variety of hardwood tree species, will help negate mast crop failures. Years of total mast failures are rare but it can happen. I remember a year on Pearl River WMA when acorn production was low, but swamp black gum trees were loaded with their black fruit. We examined deer stomachs during the managed hunt that Thanksgiving and found them full of black gum seeds.

The Department's WMA Forest Management Program helps ensure year round availability of a palatable, highly nutritious food source for the wildlife. Timber management that creates a "boom and bust" food supply as a result of single specie plantations results in cyclic wildlife populations in the plantation area. There is no balance in the food supply or the wildlife population.

Is mast important for deer? A researcher at the 9th Annual Southeast Deer Study Group Meeting made these statements: "On infertile forest lands in the South, manipulation of the habitat to increase the supply of woody browse per deer only increases an already abundant supply of low quality roughage and may have little effect on deer condition. Deer condition in infertile forest habitats can be improved substantially only by increasing availability of mast and high quality foods such as agricultural crops." Another study summed it up like this: "In

the management of southern deer, attention should be given to the diverse kinds of food use. Forestry practices should favor variety and not just browse."

Russell Sage WMA near Monroe is one of the oldest WMAs that LDWF owns. The forestry section along with district personnel have done a good job with managing timber on this area. Table 3 compares weights of male deer on Russell Sage with those from DMAP clubs in Ouachita Parish. It would indicate that little acorns will indeed grow big bucks.

Photo by David Moreland

This deer was killed at Russell Sage WMA in 1994. It weighed 170 pounds and was approximately 2-1/2 years old.

Table 1
Average Live Weight for Male Deer on Different WMA Habitat Types
1994/95

Habitat	6 mo.	1.5 yr.	2.5 yr.	3.5 + yr.
Delta Bottomland Hardwood	63	136	185	221
Mixed Pine/Hardwood	59	124	174	227
Mixed Hardwood/Swamp	52	133	179	200
Pine Dominant Timber	57	105	141	169
Longleaf Pine Timber	60	103	130	161

Table 2
Average Live Weights of Male Deer
1994/95

Area	1.5 yr.	2.5 yr.	3.5 + yr.
State WMAs	119.6	154.3	180.1
State DMAP clubs	116.9	148.2	172.5

Table 3
Average Live Weights of Male Deer - Ouachita Parish
1994/95

Area	1.5 yr.	2.5 yr.	3.5 yr.
Russell Sage WMA	140	174	219
DMAP clubs	121	148	179

Photo by Gary Kramer

BY CLIFTON COLES AND KELLIE GANDY-HADDAD

LDWF Resumes Catered Duck Hunts

The hunter crouched low in the blind as a cold, damp wind cut through his heavy woolen clothing and numbed his fingers and ears. He pocketed the battered old Faulk call and waited patiently. Then the faint whistle of wind through wings alerted him and he sprang into action as the ducks slowed their flight, fooled by the decoys scattered around the Pass-a-Loutre marsh pond. A Louisiana tradition continued.

Duck hunting is as much a winter tradition for many Louisianians as Thanksgiving dinner. Preparations continue all year long for the most die-hard of hunters. Maintenance and preparation of blinds, decoys, firearms, dogs and a thousand other details are tended with dedication and diligence.

For the average hunter who doesn't own his own camp or belong to a hunting club, finding a place to hunt can sometimes be difficult. You can wait for an invitation to a duck camp or pay to hunt at a commercial club. This year, however, a fortunate few will enjoy something different.

The Department of Wildlife and Fisheries will be serving up a catered duck hunt at Red River Wildlife Management Area this season. For a limited number of lucky duck hunters, selected in a drawing held in early October 1996, there will be decoys, blinds and transportation to a site near the pre-constructed blinds for a morning's shoot.

The Red River lottery hunt will be the first such waterfowl hunt offered in Louisiana. For several years the state has

offered lottery hunts for deer and turkey, for which interested hunters submit applications which are drawn at random for selected hunting areas.

"This is another of the Department's continuing efforts to provide a quality hunting experience for the outdoor loving public," said Dave Morrison, LDWF Wildlife Division Programs Manager.

"Establishing lottery hunts allows the Department to manage hunting pressure, supply a quality hunting experience and still provide beneficial winter habitat for ducks," said Morrison. "Excessive hunting pressure sometimes results in a less than quality experience and can redistribute waterfowl to less beneficial areas." The Department will allow shooting at the lottery hunt sites only once or twice per week.

The morning-only hunts at Red River are restricted to applicants selected in the drawing and are limited to three hunters per blind. "One person's name will be drawn, and that person may bring two others of his or her own choosing to share the hunt," said Morrison. The Department hopes to make this waterfowling experience an annual event and perhaps expand it to other WMAs.

Although waterfowl hunting will be permitted elsewhere on Red River WMA, the lottery hunt area will remain closed except for the designated hunting days.

A total of 10 lottery hunts will be offered from November through January. The hunt on Saturday, Dec. 7, will be a youth hunt restricted to adults 18 years of age or older accompanied by no more than two young hunters under the age of 16. The accompanying adult will not be allowed to hunt.

"The youth hunt is a great opportunity for youngsters to gain first-hand experience duck hunting under the supervision of an adult," said Morrison. "We hope it will encourage kids to become responsible hunters in the future."

Years of planning, hard work and habitat management have gone into making Red River WMA an outstanding waterfowl area. The U.S. Corps of Engineers and LDWF jointly own the 35,043 acres in Concordia Parish. Red River WMA is located 35 miles south of Ferriday, bordered on the east by the Mississippi River and on the southeast by the Red River.

Agricultural land was purchased with LDWF funding and the decision was made to re-establish seasonal wetlands and create important habitat for waterfowl.

Wildlife managers oversaw construction of impoundments that can be flooded by underground pipelines from two wells capable of pumping 3,000 gallons of water per minute. Pipe lines distribute the water.

The pipe lines and pumps allow for total water control of the impoundments. Managers can raise and lower water levels in each impoundment depending on particular needs of the area. Food, vegetation and other aspects of the habitat can be controlled to make the area attractive to and beneficial for wintering waterfowl.

Although the Red River lottery hunt will be the first in Louisiana for waterfowl, many hunters will recall the highly popular Pass-a-Loutre Public Shooting Grounds program. In the mid-1950s through the 1960s, the Pass-a-Loutre Game and Fish Preserve at the mouth of the Mississippi River was the location for public hunting sponsored by the Department of Wildlife and Fisheries. Small hunting camps were provided and stocked with pirogues and decoys. Hunters had only to provide their own guns, ammunition and camp food for the two-day excursions. The Department provided transportation by boat from Venice to the camps.

The Pass-a-Loutre program used a system of applications, drawings and permits allowing as many as 19 two-day hunts during the long, 70-day duck season. The program provided some of the best waterfowl hunting in the nation, but was discontinued when Hurricane Camille destroyed the camps and

Photo by Kellie Gandy-Haddad

Underground pipelines were constructed at Red River WMA for the purpose of flooding impoundments and creating important waterfowl habitat.

much of the lower Mississippi River Delta in 1969.

What can hunters expect at Red River? The U.S. Fish and Wildlife Service, Office of Migratory Bird Management predicted the 1996-97 waterfowl hunting season will be one of the best in recent memory. Duck breeding-pair populations have increased an estimated 5 percent above last year and 16 percent above the long-term average.

This year's fall flight predictions are for an estimated 89.5 million ducks, up from 77 million last year and represent a new record level. Seven of the 10 duck species most popular with Louisiana waterfowl hunters are also at or near record high population levels. This is the third consecutive year that these key species have experienced an excellent breeding season and that will mean record numbers winging their way south to Louisiana for the winter. With Mother Nature's cooperation, Louisiana duck and goose hunters may experience a truly memorable waterfowling season.

Predictions from the U.S. Fish and Wildlife Service indicate this year's waterfowl hunting season will be one of the best in recent memory. Hopefully LDWF's Red River lottery hunt will be the beginning of a popular tradition.

LDWF is hopeful that the Red River Lottery Hunt will mark the beginning of a new and popular Louisiana tradition. A variety of ducks in large numbers, with blinds, decoys and transportation catered. What more could a dedicated duck hunter want?

LDWF photo

Red River Lottery Hunt

The drawing for available lottery hunt slots was held at LDWF Headquarters on Sept. 27, 1996.

Dates for the lottery hunts are Saturday, Nov. 23, Saturday, Dec. 7 (youth hunt), Saturday, Dec. 14, Saturday, Dec. 21, Thursday, Dec. 26, Saturday, Dec. 28, Thursday, Jan. 2, Saturday, Jan. 4, Saturday, Jan. 11, and Saturday, Jan 18.

Shooting hours begin one-half hour before sunrise and end at noon. All hunters must purchase appropriate licenses and state and federal waterfowl stamps prior to arrival at the WMA. No licenses will be available at the hunting site and licenses will be checked for validity at the time permits are reviewed. Retrievers are allowed but will be limited to one dog per blind.

Six blinds will be provided on each date except on Dec. 26, Dec. 28, Jan. 2 and Jan. 4 when four blinds will be provided.

Bag and Possession Limits:

Daily Bag Limits/Ducks: Five. May include no more than four mallards (no more than one of which may be a female), three mottled ducks, one black duck, two wood ducks, one pintail, one canvasback and two redheads.

Daily Bag limit/Coots: 15.

Daily Bag limit/Mergansers: Five, only one of which may be a hooded merganser. Merganser limits are in addition to the daily bag limit for ducks.

Daily Bag limit/Blue and Snow Geese: 10.

Daily Bag limit/White-fronted (Specklebelly) Geese: Two.

Refer to the Waterfowl Hunting Regulations Pamphlet for more information and complete rules on waterfowl hunting.

Biloxi Buffet

STORY & PHOTOGRAPHY BY HUMBERTO FONTOVA

Ernest Hemingway and Robert Ruark tried to explain it and failed. I won't even try. These gentlemen had hunted practically every animal worth hunting. They'd looked down the barrel at charging lion and buffalo, stalked kudu with Kilimanjaro as a backdrop, and climbed through the clouds after wild sheep. They chronicled those hunts in some of the most enduring prose of the century, but their most heartfelt writing was inspired by decoying mallards and twisting squadrons of teal. Hemingway hunted ducks even on safari and wrote about it in *The Green Hills of Africa*. On the vast Serengetti, surrounded by the biggest concentrations of game animals on earth, the bug wouldn't leave him. Any duck hunter would understand why. For the afflicted, there is no cure.

There has to be a reason, but even these masters of the language threw up their hands when asked to explain the burning appeal of duck hunting. Couched in the code of Hemingway's and Ruark's prose the message reads: "It's a duck-hunter thing. You wouldn't understand."

How true. If you have to ask, you'll never understand. If you understand, you'll never have to ask.

Riding down Bayou St. Malo at dawn last winter I couldn't help wondering (and hoping) if this affliction isn't congenital. We had three generations of Fontovas on board, aged nine to 69. Rounding a bend as we entered Biloxi WMA, a huge flock of ducks erupted from a shallow lagoon on our left.

What a sight. What a portent for the morning's hunt. We howled like lunatics, pointing, high-fiving and slapping each other on the back — grown men and kids alike.

We make an average of 20 hunts a season and here one flock of ducks unhinges us. Hemingway would understand. This type of excitement cuts across the generations.

"Looks good enough for me!" Dad snapped. "Let's set up right there!" Dad, as usual, was ready to start hunting then and there. And probably it *was* good enough. A good portion of those ducks would filter back in singles, pairs and small groups all morning. How often do you spook ducks on the way in, then again a few hours later on the way out from the

The Biloxi Wildlife Management Area offers a vast spread of marshland for duck hunting.

same place? They came back. Ducks pick certain ponds for a reason.

Our duck hunting strategy is simple. Go to them. Then wait for them to come back to you. They almost always do, but not always immediately.

That's fine. I can think of worse ways of spending a fall morning than scanning a horizon free of billboards and shopping centers, watching pelicans perform a circular ballet in the sky, of watching redfish smashing cocahoes among my decoys. All this with a cool breeze at my back and my sons at my side. Here they learn to distinguish a clapper rail from a dowitcher, an Ibis from an egret, a skimmer from a gull, and right from wrong.

Then, inevitably, the tug on the sleeve. "Here they come, Dad. On the right. Get ready."

We hunt like gypsies. And it's hunting in the genuine sense of the word. Perfect for WMAs. No permanent blinds required, and not just because they're not allowed. It's because we insist on surprising the ducks. No dangerous boat ride in the dark. No mudboats. And we enjoy plenty of shooting. Biloxi's 40,000 acres and pond-pocked marshland offer a whole season full of this type of hunting, without ever hunting the same place twice unless you want to.

A good portion of the ducks we had just spooked probably would drift back in small groups and pairs throughout the morning. In a few hours we'd probably have close to a limit. But cooler heads prevailed. The interior marsh always holds the most ducks at Biloxi. If this lagoon held this many, the ponds off Bayou Sue would be black with them. We kept going.

We slowed for a sharp bend in the bayou and an eruption of wings drowned the outboard's roar. What a sight. What a sound. They lifted in a thunderous mass from a shallow lagoon and we knew we had our spot.

By the time we'd parked the boat and started unloading pirogues the sky was black with ducks. It was glorious. A few were already circling back down. Most looked like gadwall. That's the bread and butter duck around the Biloxi Marsh. A gorgeous duck to watch drop from the heavens into the dekes, especially in flocks of a dozen.

I was throwing out decoys with Mikey while the rest of the gang was on the bank fashioning an impromptu blind with palmetto leaves and small bundles of rousseau cane we always bring along. We stick five palmettos in front and five in back of the 14 foot pirogue which serves as the base of our portable blind. Then we erect a thin screen of rousseau to blend better with the marsh. The blind was just going up and it was 7:45 a.m.

That's probably not what you'd call a traditional duck-hunting itinerary. Actually, we were a little earlier than usual. When we hunt ponds on the eastern edge of Biloxi WMA, Lake Eugenie and Bobs Lake, we might not start till 10 a.m. Experience has shown that those are resting areas for the ducks. They are saltier ponds, generally barren of the millfoil and widgeon grass that clog ponds and lagoons in the interior and on the western edges of the WMA. At times, we've had greys weaving into our decoys steadily in these resting areas until 2 p.m. Sometimes they didn't start until almost noon. Again, not a traditional duck hunting schedule, but often a more leisurely, safer, and more productive one.

Ducks feed and rest in different areas. Fanatical, lifelong duck hunters often shake their heads and chuckle when I explain that I apply the same strategy and tactics for ducks as most people apply to deer hunting — scouting, mobility, observation, analysis of travel routes and location of food sources. This strikes a lot of permanent blind hunters as odd. Call us crazy, but on those blue-bird days in late season when the greys and widgeon fly over their blinds at 200 yards they're often on their way to rain down on us.

We set out the bulk of the 36 decoys in a cove to the *right* of the blind, not directly in

front. Greys (actually most puddle ducks) prefer to land in open water away from the bank. With the wind at an angle from our backs this would put incoming ducks in front of us as they approached the decoys.

"Dad!" Mikey pointed. "Look!" Four greys were boring in as we dragged the pirogue behind the brush-blind. Nobody was loaded up yet so we ducked and watched.... *Spliiissshh*. They touched down. Mikey grabbed my sleeve and pointed with his chin. Another six were right behind, cupped up beautifully, the sun shinning off their white bellies. Incredibly, another four followed behind them, angling down from the left. They were so close we could hear the wind rushing through their wings as they descended.

We were in a trance. Then another splash right in front. A pair of bluewings plopped down not twenty feet from the blind and started looking around nervously. The drake was gorgeous in his winter plumage. The white crescent on his face flashed in the sunlight. Nobody moved. Nobody reached for a gun. Nobody grabbed frantically for shells. We knew we'd get the limit. We knew we had a winner of a spot. For now, we just enjoyed the show.

That show continued for three hours. Five minutes after setting up a flock appeared as specks in the sky, winging in from the north. In a permanent blind set-up we used to ignore these. But not here. I started with a loud hail and they seemed to react, slightly. Another hail and they dropped a little lower.

The rest of the gang joined in with short, sharp hails from Rick and whistles from Dad and the kids. Whistles are perfect for kids too impatient to master a hail call. They also work like a charm. The drake gadwall whistles, so do teal and widgeon.

We could only marvel as they dropped. When ducks want to drop fast they tuck their wings in close. The wind rushes through them and you can actually watch the feathers ruffle as they weave down.

Looking right and left for a second I saw rapt faces. Yep, it's congenital. They are duck hunters. They always will be.

The ducks were hovering over the decoys now, one was landing...NOW!

We all hunt together, but take turns shooting. This means we all experience the sight of decoying ducks until the five or six man limit is bagged. Isn't that what it's all about? The point, for us, isn't to get a limit by eight and hurry home. It's to spend a day afield savoring the duck hunting experience and each others company, then maybe close it out fishing for some specks and reds.

For this, the Biloxi WMA serves splendidly. The southeastern entrance to this WMA lies five miles down Bayou-La-Loutre from Breton Island Marina in Hopedale. Turn left into Bayou St. Malo and go up another two miles till you see the signs.

Stump Lagoon, probably the main entrance, lies about nine miles from the marina. Watch it here on a low tide, common during the second split. Ironically though, fierce fronts during the second split produce the best hunting since the low tide concentrates ducks in the deeper lagoons. It's getting to them that's tricky, but that's why it's called hunting.

Ducks are notoriously nomadic in this marsh. Scouting is almost mandatory. Yes, this is *hunting*. Look it up in the dictionary. The ponds between Bayou Sue (Hasouse, on the maps) and Stump Lagoon generally hold good concentrations throughout the season.

To close out the day with a few hours of fishing, the deep holes on the curves of Bayous Sue, St. Malo and Crooked often hold specks and reds in winter. Bayou La Loutre itself, past Stump Lagoon, is also good. Muscle Bayou is probably the most consistent and heavily fished. Slow trolling with purple or chartreuse jigs is the best way to locate the fish.

Forty thousand acres of prime brackish marsh an hour from New Orleans; I have to chuckle when I hear so many former duck hunters say: "I gave up duck huntin'. Can't find no place to hunt!"

Closing out the day with a good catch of reds proves that Biloxi WMA offers a buffet of hunting and fishing.

Black Powder

A Real Test of Hunting Skills

BY CHARLES W. FRANK

Like many of you, I've fine-tuned my favorite hunting rifle, a Shilen custom job in 7mm Remington Magnum, till I can consistently get better than one minute of angle groups. At 300 yards the group stretches an inch or so but a deer I can see with my aging eyes is a pretty sure kill. With a 12-inch zone for lethal shots, this helps remove any question as to my ability to take meat for the table or a trophy for the wall. Optics and propellants, glass bedding and a spotting scope also refine my abilities. So, when an old friend and a much younger friend started extolling the thrill of primitive weapons, I just had to try it. The stalk becomes much more thrilling — you need to reduce the range as much as possible, preferably to less than 100 yards.

The spirit of hunting and the attitude of sportsmen have changed dramatically in the past generation. My peers were primarily interested in how many critters they could bag. Restraint was not a generally recognized factor. Now we have learned to respect the quarry, passing up immature and inferior animals; more interested in the quality of the hunt and less interested in the kill. Sportsman became involved in training sons and daughters in the field, and this forced a new respect for game laws and what they represented. No sportsman today would dare boast of excesses without incurring the disdain of his peers.

The advent of inexpensive black powder replicas fit in well with this new thrill of the chase. The difficulty of stalking your prey became, in itself, a necessity and a new venue. The day of the muzzleloader has returned and is here to stay.

Is the smoke pole versatile? You bet it is. Whether you're after a spring gobbler or a fall white-tail today's muzzleloader arsenal has a weapon that fills the bill. From .32 caliber to .50, including a number of fine shotgun models, you can find what you're looking for. Paper punchers and serious hunters alike are turning to these guns. Economy, accuracy and versatility are the watch words.

The first step was getting a couple of manuals to study just what was available in weapons, bullets and propellants. A good starting point seemed to be Thompson/Center's *Black Powder and MuzzleLoading Firearms Manual.* Also, Mountain State

Photo by Soc Clay

Muzzle Loading in Williamstown, W.Va., has a number of tomes on the subject, ranging from a CVA Handbook and Lyman's manual, to a number of privately issued "how to" books on the subject. You would be well served to call Mountain State's 800/445-1776 and order one of their excellent catalogues. It will list everything you'll need in the way of equipment and accessories for black powder rifle, pistol and shotgun. Their operators are knowledgeable and seem genuinely interested in getting you started on the right track.

Available weaponry is divided into three basic styles, flintlocks, cap and ball and "in-line" weapons. The flintlock, an older design that went out of style during the Civil War, poses a few problems that can be avoided by the more advanced cap and ball weapons. The pan and adjustment of a flintlock limits the discharge to a more experienced hand. If you are just starting out, I'd suggest you avoid them.

Photo courtesy of Charles Frank

When a muzzleloading shotgun is fired, the line of sight is blocked by smoke. This can be a problem when chasing quail or other fast moving targets.

The cap and ball are found in two basic designs. The older cap locks and the more recent development of the in-line ignition system would be my weapons of choice for the neophyte. The older cap and ball system requires bore swaging (cleaning) with soap and water or a powder solvent after every few rounds. Powder build up restricts bore diameter rapidly, increasing the difficulty of seating a patched round ball or mini ball. The in-line ignition system allows the shooter to fire a number of shots — some manufacturers boast of up to 100 rounds between swagings. I think this is a bit exaggerated. It is however, a big factor in removing one of the difficulties of using the smoke poles on an extended hunt where cleaning the barrel in the field can pose a bit of a problem.

The best place to acquaint yourself with the muzzleloader is on a rifle and pistol range. The bench rest allows you to zero your weapon, compare powders, powder charges and bullet drop. There is a micro fraction delay between the firing pin striking the primer and the ignition of the powder charge that calls for a steady hold when firing off hand.

A word of caution — be sure you wear safety glasses and hearing protectors. I grew up thinking these were only for wimps. I still have good vision, but my hearing has been irreparably damaged from excessive noise levels in the field. On the other hand, if you are a part of the generation that puts the boom box and the amplifiers on full bore, it may not matter — you're probably going to go deaf anyway.

An accessory that you want to carry in the field is a possibles bag. This is a small draw string pouch that attaches to the belt. It should be just large enough to hold a few primers, lubed cotton patches, a powder flask with attached measure, a nipple wrench, an extra nipple and a nipple pick. Nothing is more exasperating than a misfire in the field without these necessities.

Now for the particulars of charging your weapon. There are two basic powders in use. Black powder, the traditional propellant, and PYRODEX, a newer formula, are yours to select from. Black powder is more hygroscopic (takes up moisture rapidly from the air) and burns a bit dirtier. Made from a combination of charcoal, sulphur and potassium nitrate, the components were easily obtained and mixed by frontiersmen. Still used by many contemporary shooters, it is gradually being replaced by the synthetic propellant, PYRODEX. Cleaner burning and more moisture resistant, it is a logical choice for the hunter.

A dozen charges selected from your manual for the bullet weight and caliber of your weapon should be pre-measured into suitable containers. I use 35mm film canisters, readily obtainable at no cost from any photo

Photos courtesy of Charles Frank

Left, hammer and nipple detail of a Thompson cap and ball muzzleloader. Right, the detail of an in-line muzzleloader hammer and nipple.

processor. You can also use a graduated powder measure to pour charges in the field. I don't particularly like this as wind and moisture can pose a few unnecessary problems. With these trial loads you should be able attain a three shot group, with iron sights, of an inch to an inch and a half at 50 yards.

If you are using round balls, a lubricated patch is driven into the barrel. The patch fills the groves in your rifling, assuring complete ignition. At extended ranges (100 yards or more), increased accuracy is obtained with mini-balls. These conical lead slugs were designed by a French army officer, Claude Etienne Minie. They extended the range and improved accuracy. During the Civil War, muzzleloaders using this innovation had a killing range of almost 1,000 yards. With massed ranks in vogue at this time, the carnage was awesome. The Civil War had the largest number of casualties of any conflict we ever fought. The advent of mini balls and rifled barrels was largely responsible for this.

The new mini balls are pre-lubed with a heavy grease and require no patch. For either bullet style, mark your ram rod to be sure you seat each slug or ball firmly against the powder charge. A bullet that is not seated firmly will build up excessive chamber pressure and will cause your target grouping to expand considerably.

A few safety suggestions for charging your weapon. Place the butt against your foot when using the bullet starter and the ram-rod. Be sure to have arms, eyes and ears properly covered. Needless to say, no smoking can be allowed around open powder canisters or while charging your weapon. Remember, the muzzleloader requires more care in loading and unloading than a modern center fire weapon. The terms "hang-fire", "mis-fire" and "flash in the pan" had their origin in early muzzle loading mishaps.

Although I have cast my own bullets as an economy measure, I no longer recommend this. The danger of lead inhalation while casting is possibly slight, but why take chances? This is particularly true if your kids watch. The savings on the relatively few rounds you'll fire just don't warrant the risk.

A good powder solvent and a box of cotton patches are the last necessities for use on the range. You will build up a powder residue after a few rounds, making bullet seating more difficult. There are a number of good solvents, but I like Hoppe's #9 or Shooter's Choice. Swaging for just a few moments with a solvent soaked cotton patch can clear up fouling.

Pistols use similar techniques. They are surprisingly accurate and the low cost of excellent replicas is an added incentive. Coupled with the relative cost of ammunition when compared to centerfire rounds, they will make shooting a lot easier on your wallet.

Also growing in popularity are shot guns for primitive weapon aficionados. The only changes in procedure are the selection of the proper powder and the proper upper and lower wads to hold the shot charge in place.

Now is a good time to take that first step into primitive weapons. You will find that the added challenges of mastering the equipment and the requisite for finely honed skills will help put the "hunt" back in hunting.

A powder scale and trickler is used to measure the trial charge for a muzzleloader. Varying the charge by a grain or two, more or less, can be the means of fine tuning a rifle.

Photo courtesy of Charles Frank

With the increased number of cooperators in the Louisiana Deer Management Assistance Program (DMAP) and the effects of state management practices on public Wildlife Management Areas (WMAs), interest in trophy white-tails is on the increase in the Bayou State. Here is a description of trophy white-tails and current rankings in the Louisiana Big Game Records Program.

Defining Bayou State Trophy White-tails

STORY AND PHOTOGRAPHY BY CHRIS BERZAS

Most Louisiana deer hunters are concerned primarily with obtaining venison for the table. Feasting on this tasty delight, either fried, stewed or even fricasseed, enables the cold nights of late fall and winter to pass pleasantly away, especially when such table fare is shared with friends and family around the campfire.

But more and more Bayou State deer hunters are also turning their thoughts to inedible parts of white-tails these days. Interest in antlers and trophy deer hunting is growing in the Bayou State, primarily as the result of management practices on private lands through the Deer Management Assistance Program (DMAP) operated by the Department of Wildlife and Fisheries. Similar deer management programs are underway at private enterprises such as Willow Point Island in East Carroll Parish and other hunting clubs along the west banks of the Mississippi and Atchafalaya rivers. There are also many more statewide measuring and scoring rallies these days, making trophy antler ranking a readily available opportunity towards recognition of an impressive white-tail.

Boone & Crockett (B&C) and Pope & Young (P&Y) are official awards programs utilized in ranking and rating North American Big Game species. For deer, scoring is based on antler measurements to include lengths, circumference, spread, number of points and symmetry. Boone & Crockett trophy status may be attributed to white-tails taken by any weapon, whereas Pope & Young trophies must be killed by bow and arrow. The Longhunter Society uses the Boone & Crockett measuring system to rank trophy white-tails taken by muzzleloader.

In its original program, minimum entry scores for typical and nontypical white-tails in the Louisiana Big Game Records taken by gun were 160 and 185 B&C points respectively. Archery trophies were ranked beginning at 90 B&C points for typical trophies and 125 B&C points for nontypicals. National B&C records begin at 170 B&C points and 195 B&C points for typical and nontypical white-tails respectively: whereas national Pope & Young records begin at 125 B&C points for typicals and 150 B&C points for nontypicals.

In 1992, the Louisiana Outdoor Writers Association (LOWA) teamed up with Dave Moreland, Deer Study Leader with the Louisiana Department of Wildlife and Fisheries (LDWF) to promote the annual Louisiana Big Game Records Program and establish a three-year recognition program. Changes were made in minimum entry scores for white-tails in the three-year recognition program.

On an annual basis, the minimum entry scores for typical and nontypical white-tails taken by gun continues to be 160 and 185 B&C points respectively. Regarding archery trophies, typical trophy scores were raised to 110 B&C points and 140 B&C points are necessary for nontypical bucks to be ranked.

Black Powder enthusiasts should be happy to note that categories for white-tails taken with muzzleloader (blackpowder) were also established in 1992, and Louisiana Big Game Record Book entries begin at 120 B&C points for typical white-tails and 150 B&C points for nontypicals. The Long Hunter Society recognizes trophy white-tails ranking 10 points higher than state records, 130 for typicals and 160 for nontypical white-tails.

On a revolving three-year program similar to Boone & Crockett yet with a lower entry level, the Louisiana Big Game Records Program includes a listing of all white-tail bucks taken by archery beginning at 90 B&C points typical, and 100 B&C points nontypical. Muzzleloader records are also lowered every three years to allow blackpowder trophies to be recognized at 110 B&C points for typicals, and 130 B&C points for nontypicals. Gun (rifle and shotgun) entries are also lowered to 150 and 175 B&C points for typical and nontypical white-tails respectively.

According to Moreland, an employee at each LDWF district office is qualified to score antlers for the state's Big Game Recognition Program. Any bucks submitted for national recognition must be scored by official Boone & Crockett score keepers, also available through the department.

Just defining Bayou State "trophy" white-tails can be misleading. Any deer with eight or more long points and a wide spread is truly a wall-hanger in Louisiana, yet for the Louisiana Big Game Records Program a bit more is required.

"It usually takes a 10 point or better typical buck with relatively long tines and thick mass to be considered," admitted Moreland. "The system is based on mass and symmetry.

"For nontypical trophies, it takes 16- to 20- points to be considered along with mass and main beam length," added Moreland.

According to the Deer Study Leader, measurements are taken in 1/8 inch increments in accord with the B&C scoring system.

Usually, the inside spread is measured at its greatest width as the first measurement. Then the lengths of both main beams (antlers) are measured and these are placed in different columns on a chart for addition purposes.

In the column under each main beam, the length measurements of all the points are listed beginning with the brow tines. Tine (point) measurements are obtained by determining where the point meets the main beam and measuring to its tip.

Circumference measurements are then taken at the smallest width between the burr and the first point, as well as between all other points on the antlers — and these are also placed under the column corresponding to the appropriate main beam.

The last column is reserved for measurements of all abnormal points and differences in asymmetry observed between right and left main beams.

To obtain the final score, the spread credit and measurements taken on each antler are summed (gross score). Then asymmetrical differences and abnormal point measurements observed in the final column are subtracted from the above sum resulting in a final tally (net score).

It is important to note that the measurement description mentioned above has to do with scoring antlers of typical bucks. Regarding nontypicals, the measurements of abnormal points are added instead of subtracted.

However, the practice of measuring antlered trophies accurately is well beyond the scope of this article. So for certified measurements of both typicals and nontypicals, please consult a certified score keeper through your local LDWF District office.

We had extremely cold weather during the winter of 1995-96. Usually this type of weather is hoped for since many believe deer are more apt to move in such conditions, especially during the rut.

According to Moreland, the Louisiana Big Game Recognition Program (1996-97) has been declared very successful partially due to that cold weather.

"Our records indicate this is the most B&C deer harvested during any one-year period in Louisiana," said Moreland. "The idea of managing a herd for the production of quality deer has really caught on in this state. Many clubs are beginning to reap benefits from this program.

According to Moreland, Louisiana has experienced a change in the age structure of white-tail bucks. Many more young deer are now being recruited into the older buck segment due to management practices on both private and public lands in Louisiana.

"We've also observed a dramatic increase in the number of archery trophies," added Moreland. "It's not difficult for quality bucks of three years of age and more to make the record book under the archery division."

Recent entrants for the 1995 Big Game Recognition Program were as follows:

In the Gun — Typical Division are: 179 7/8 trophy by Anthony Guice in Tensas Parish; 177 5/8 trophy by John W. King in Concordia Parish; 171 1/8 trophy by David Long in Bossier Parish; 163 3/8 trophy by Steven Whatley in West Feliciana Parish; a 160 7/8 trophy by Willie Dufrene in Tensas Parish; and a 151 3/8 trophy by Kenny Cannon in West Feliciana Parish.

In the Gun - Non-typical Division, a listing was made of a 213 1/8 B&C trophy by Kevin Collier in Grant Parish.

In the Archery — Typical Division, the entrants were: a 164 5/8 by Joe Hatton on the Tensas River NWR (the new #2 ranking); 156 7/8 by Clay Cooper in Concordia Parish;152 4/8 by Kenny Dunham on the Tensas River NWR; 152 4/8 by Mike Edwards at Willow Point in East Carroll Parish; 137 by Hank Kizer in Concordia Parish; 135 5/8 by George Spivey III in West Feliciana Parish; 135 1/8 by James C. Davis on the Tunica Hills WMA; 133 2/8 by Benny Burris in Concordia Parish; 133 by Douglas Meinke in St. Helena Parish; 129 5/8 by Billy Thomas in Caldwell Parish; 125 2/8 by Willie Blanchard on the Atchafalaya Delta WMA; 123 3/8 by John Wood in Concordia Parish; 123 1/8 by Lloyd Landry III on Bayou Cocodrie NWR; 121 5/8 by Kippy King on the Tensas River NWR; 118 6/8 by David Vinson in Tensas Parish; 104 2/8 by Shane Andrepont in St. Landry Parish; and 97 7/8 by Ronald Aucoin on the Atchafalaya Delta WMA.

The trophy pictured on the left, an 8-point, 133 4/8 Pope & Young typical, was taken by Charles Mistric in 1991 at the Thistlethwaite WMA. The photograph on page 23 shows Louisiana's famed McMurray buck (30-point nontypical) which was highlighted in the Louisiana Conservationist September/October 1995 issue. It currently holds the number one spot in the nontypical division (by gun) in the Louisiana Big Game Records and a world class nontypical, ranked at the number five spot in B&C records.

LOUISIANA'S TOP NONTYPICAL BUCKS - ARCHERY

Rank	Score	Taken by	Parish	Year
(Four listed, only #1, 2 & 3 Pope & Young eligible)				
1.	203 5/8	Rodney Lee	E. Feliciana	1983
2.	186 4/8	Johnny Warren	Concordia	1993
3.	157 3/8	Milton Johnson	St. Tammany	1991
4.	101 5/8	Mike May	Madison	1985

LOUISIANA'S TOP TEN NONTYPICAL BUCKS - GUN

Rank	Score	Taken By	Parish	Year
1.	281 6/8	James McMurray	Tensas	1994
2.	252 2/8	(Pick Up)	Concordia	1848
3.	227	(Pick Up)	Concordia	1969
4.	219 6/8	W.D. Ethredge	Caddo	1988
5.	218 4/8	Drew Ware	St. Martin	1941
6.	216 7/8		Concordia	1956
7.	213 1/8	Kevin Collier	Grant	1995
7.	213 1/8	Sonny Sykes	W. Feliciana	1994
8.	206 7/8	J. H. Thurmon	Claiborne	1970
9.	206 6/8	Richard D. Ellison	Grant	1969
10.	206 4/8	(Pick Up)	Caddo	1991

LOUISIANA'S TOP TEN TYPICAL BUCKS - ARCHERY

Rank	Score	Taken By	Parish	Year
1.	175 2/8	Shannon Presley	St. Mary	1981
2.	164 5/8	Joe Hatton	Tensas	1995
3.	161 5/8	Lane Mitchell	E. Carroll	1993
4.	161 4/8	James K. Morgan	E. Feliciana	1977
5.	156 7/8	Clay Cooper	Concordia	1996
6.	152 4/8	Kenny Dunham	Tensas	1996
6.	152 4/8	Mike Edwards	E. Carroll	1995
7.	149 2/8	Robert H. Jarvis	E. Carroll	1993
8.	145 4/8	John L. Smith	Caddo	1993
9.	143 4/8	Edward Foreman Jr.	Tensas	1993
10.	142 7/8	George R. Bryant	E. Carroll	1993

LOUISIANA'S TOP TEN TYPICAL BUCKS - GUN

Rank	Score	Taken By	Parish	Year
1.	184 6/8	John Lee	Madison	1943
2.	184 4/8	Earnest McCoy	Bossier	1961
3.	184 2/8	H.B. Womble	Franklin	1914
4.	180 5/8	Shawn P. Ortego	St. Landry	1975
5.	180 4/8	Buford Perry	Madison	1961
6.	179 7/8	Anthony Guice	Tensas	1995
7.	179 6/8	Bill Cranford	Union	1963
8.	177 5/8	John W. King	Concordia	1995
9.	177 3/8	Steven L. Morton	Claiborne	1986
10.	176 2/8	Willard Roberson	Richland	1968

LOUISIANA'S TOP TEN MUZZLELOADER BUCKS

Rank	Score	Taken By	Parish	Year
1.	151 4/8	Jeff Dobbins	Tensas	1992
2.	149 1/8	Morgan Hess	Rapides	1995
3.	148 7/8	Reggie Watson	Caldwell	1989
4.	140 4/8	John Tuma	Avoyelles	1994
5.	138 4/8	Bob Harver	Rapides	1995
6.	133 6/8	Bob Mixon	E. Feliciana	1990
7.	131	David Moreland	E. Feliciana	1992
8.	130 4/8	John Schmidt	W.Feliciana	1991
9.	125 5/8	Darryl Esthay	Rapides	1992
10.	120 7/8	Randy Lacombe	Avoyelles	1992

For more information, contact David Moreland, Louisiana Big Game Records, LDWF, P.O. Box 98000, Baton Rouge, LA 70898-9000, (504) 765-2344.

Photo by R.L. Langston

Bald Eagles

BY TOM HESS

In the late 1950s only four active bald eagle nests were identified in Louisiana. By 1994 there were 1,099 nesting territories recorded in the state.

The nation's forefathers adopted the bald eagle as our national symbol in 1782. The bald eagle (*Haliaeetus leucocephalus*) is the second largest bird of prey in North America and was a common south Louisiana resident during the early 1900s.

Population levels of the bird, unknown during the early part of the century, plunged to unprecedented lows in the 1950s. Only four active nests were identified in Louisiana between 1954 and 1960. Personnel of the U.S. Fish and Wildlife Service reported six or seven active bald eagle nests in Louisiana in 1972. Many factors — including habitat destruction, contaminants, human disturbance, and shooting — contributed to the decline nationwide.

The major factor contributing to the nationwide decline of bald eagles, peregrine falcons, brown pelicans, and other birds of prey from the 1950s through the 1970s was the use of DDT. This pesticide concentrated in prey commonly eaten by the birds. It altered the birds' calcium production, resulting in eggs with thin shells that broke under the weight of incubating adults.

Fortunately, the cause of the breeding failures was identified in time. The use of DDT was banned in the United States in 1972.

Wayne Dubuc, a noted Louisiana eagle expert from Patterson, initiated the first formal Louisiana bald eagle survey in 1974. He documented five active nesting territories in the Morgan City area during the first survey.

An active nesting territory consists of one or more nests in an area used by a pair of eagles. Many territories have two or three

nests that are alternated from year to year. Most nests in Louisiana are found from New Iberia to the Mississippi state line along the marsh/swamp interface where cypress trees and marsh grasses integrate, but are now found statewide. Nests are now documented in Avoyelles, Bossier, Calcasieu, Morehouse, Sabine, St. Landry and Tensas parishes.

Adult bald eagles are large, dark-bodied birds with white head and tail feathers. Immature birds are mostly dark brown with blotchy white under the wings and tail. It takes four to five years for an immature eagle to attain the characteristic white head and tail feathers.

Female bald eagles are larger than males and weigh up to 14 pounds, while males average eight to 10 pounds. Eagles range from three to three and a half feet in length, with a six to eight-foot wingspan.

Louisiana bald eagles are winter/spring nesters. The birds begin nesting activities in December and young birds generally leave the nest by mid-May. Nests are usually found in tall, dominant trees towering above the surrounding forest or swamp. Bald cypress are preferred trees, but nests are also found in live oak and pine trees.

Nests are constructed of sticks and can be six to eight feet in diameter. Females lay an average of two off-white eggs, which hatch in 35 days. Young eagles fledge (acquiring the feathers necessary for flight) and leave the nest 12 weeks after hatching. Bald eagles feed on fish, waterfowl and furbearers. They arrive in Louisiana by October and migrate to the northern states and Canada by June.

The Louisiana Department of Wildlife and Fisheries (LDWF) began formal bald eagle surveys in 1984. Aerial surveys are conducted by fixed-wing aircraft or helicopter, beginning in January and continuing through May. Each nest is visited twice and nest condition, activity, eggs present and age of young are recorded.

The Global Positioning System (GPS) is used to map and locate nests. GPS equipment produces precise latitude and longitude coordinates that facilitate nest revisitation.

LDWF biologists analyze survey information to compute productivity figures. During the 1994-95 nesting season, 101 active nesting territories produced 157 young. Rapid population expansion in recent years can be attributed to an overall improvement in Louisiana's environment, habitat protection, and the general public's environmental awareness.

Most of Louisiana's bald eagle habitat is protected by both the state and federal wetlands permit system. LDWF provides survey information to state and federal agencies, which use it during permit review.

Agencies follow parameters set forth in "Management Guidelines for the Bald Eagle in the Southeast Region." Human activities are regulated within a 1,500-foot radius of nest trees from Oct. 1 to May 15. Disturbance may also be minimized within a one-mile radius of a nest tree if necessary. Agencies work to minimize impacts associated with development, and assist developers with viable "work-around" strategies when a project occurs in close proximity to a nest.

Bald eagles are protected under the Bald Eagle Protection Act Migratory Bird Treaty Act, and Endangered Species Act. It is unlawful to harass, take, or possess a live or dead bald eagle, any part of the eagle, a nest, or an egg. Violations can result in fines ranging from $500 to $20,000 and prison terms of six months to two years.

The bald eagle was "downlisted" from endangered to threatened in the contiguous 48 states on July 12, 1995. The intent of the Endangered Species Act, according to the U.S. Fish and Wildlife Service, is " ... to recover species to the point where they are again viable, self-sustaining members of their ecosystems, and protection under the Act is no longer necessary. Successful recovery and removal from the endangered and threatened list is the service's final goal for the bald eagle."

Bald eagles have made a notable comeback throughout the Southeast. From 1984 to 1994, the population increased from 454 occupied nesting territories to 1,099. If current population trends remain constant and if no decline in productivity occurs, bald eagles should be completely "delisted" in the Southeast region by the turn of the century.

Public environmental awareness has been a major component of Louisiana's bald eagle recovery. Citizens report nest sightings, eagle harassment and violation incidents to DWF personnel of the U.S. Fish and Wildlife Service. That facilitates survey and enforcement activities.

The bald eagle program has become yet another wildlife management success story.

If current population trends remain constant and if no decline in productivity occurs, bald eagles should be completely "delisted" in the Southeast region by the turn of the century.

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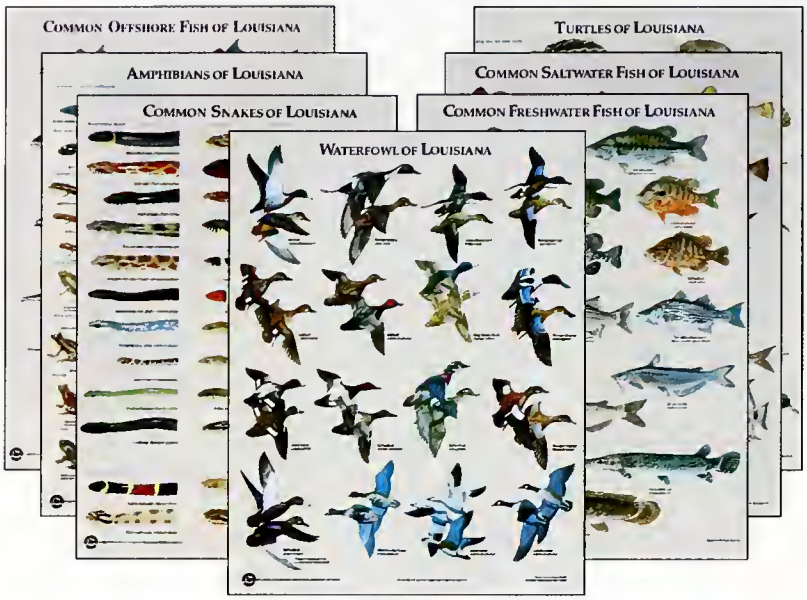

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THE PINE WOODS

BY JEAN MAY-BRETT & JOHN TROWBRIDGE

A sure sign of spring in Louisiana is a fine coating of yellow-green dust on everything. It is easily visible on the surfaces of light colored cars and is left behind as green lines on the sidewalks and roads after a rain. This is pine pollen that falls from the small male cones on pine trees. The larger, more familiar cones are where fertilized seeds develop and mature over a two year period. The mature seeds drift to the ground with a single membrane wing. Children delight in playing with these seeds by watching them fall in their characteristic whirling fashion.

Pine forest covers most of the state and represent thousands of acres for recreational activities such as camping and hunting. These forests are the habitat for many types of wildlife such as gray squirrels, white-tail deer, owls, wild turkey and a wide variety of insects. Further, the economic return on lumber products from Louisiana forests totals more than that of all other agricultural commodities combined. Management of our forests today is essential if we hope to enjoy them in the future.

A pine seedling puts a lot of energy into root development and only produces a tuft of pine needles above the ground. In the following years the pine tree quickly grows vertically. In proper sandy soil the native loblolly pine (*Pinus taeda*) is one of the fastest-growing southern pines and will reach heights of over 80 feet. The loblolly, cultivated on tree-farms for lumber and pulpwood, matures in 20-25 years.

Pine trees are said to be fire adapted. If a fire were to sweep through the pine forest the first year sapling would lose its needles, but would be able to survive by drawing from its deep tap root. A second year sapling or older tree could avoid fire damage because of its height. Most fires in pine forest are low brush fires. To minimize forest fire damage, managers set control burns of the understory to prevent a build of fuel material. This prevents a thick understudy of brush from developing; therefore, if a fire does go through the forest, it does not have the fuel to start a larger crown fire or wildfire. The longleaf pine community is not shade tolerant, and its survival is dependent on the clearings opened by periodic burning. Forest managers also use prescribed burning to control hardwood growth and prevent losses to disease.

Foresters must always be watching for signs of stress in the forest. The southern pine beetle is destroying large stands of pine trees. This species is attracted by the odors given off by damaged trees. Injuries may be caused by natural forces such as hurricanes and tornadoes, lightning, or inadvertently by people such as through logging operations for an example.

Pine Sense (Wondering through the woods)

Louisiana has some wonderful state parks where you can experience first hand the pine forest. If you do not already have a nature journal, this is a good time to start your own. Using your senses, make observations while visiting the pine forest.

Smell: Pines have a distinct smell. Have you smelled pine scent before? There are many home products such as room deodorizers that use pine scent. Go out and see if you can identify a pine smell in the forest.

Touch: You may have seen pine sap (resin) running down a tree. What does the sap feel like? Place your hand on the tree and describe the texture of pine bark.

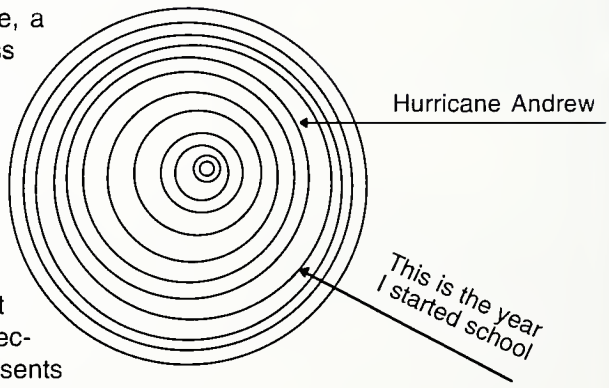
Hearing: Have you ever heard of the "whispering pines"? Sit very still in a pine forest and listen. Listen for the sound of a woodpecker. If you have a small tape recorder, record these sounds and play them back later.

Sight: Stand back and note the shape of a tall pine tree. Perhaps you can sketch it using natural materials you find on the ground. Examine a tree close up and look for small seedlings at the base and check for insects traveling on the tree bark.

Class or Home Activity

Lines of time

When a tree is cut down, a cross section provides a view that reveals much about the life of the tree. The knowing eye will be able to tell if there was earlier fire damage, a wound from a lightning strike or stress periods from changes in the year to year weather patterns.



Perhaps during the holiday season, it would be possible to get a thin section cut from the bottom of a tree; this is sometimes called a "tree cookie." Look at the rings starting at the outside moving into the center. Count the number of dark lines in the cross section. Each one of the dark lines represents a winter season. How old was the tree when it died? Begin with this year and work backwards to determine when the tree was planted or germinated. Use these lines as time lines and label them with important dates in history or important dates in your life. See the figure as an example.

Vocabulary

forest - a large tract of land, generally covered with trees, and the community of plants and animals found there.
habitat - the environment best suited for a plant or animal.
sapling - a young tree.
wildfire - a fire other than a controlled burn.

References:

Little, E. (1980). *The Audubon Field Guide to North American Trees.* New York: Alfred Knoph.
Truesdale, F. & Culpepper, J. (1995). *Louisiana's forests.* Baton Rouge, LA: Louisiana Office of Forestry.

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LAW LINES

Behind the Badge

BY MAJ. KEITH LACAZE

Use Caution Afield

Hunting season is the busiest time of year for wildlife agents. Deer, small game and waterfowl seasons are in full swing. Thousands of hunters are out in the field. Complaints and reports of illegal activity come pouring in and everywhere you go people have questions about the regulations. One wonders how to wring more time out of a 24 hour day and how far along they are with cloning technology.

It is difficult enough to take care of the district and the job is further complicated by the high (and getting higher) number of accidents, lost hunters and tragic deaths which occur every year.

Anyone can meet with accident or disaster but odds for survival are in favor of those who are prepared. Let's take a look at some accidents that actually happened. Perhaps we can learn from those unfortunate people and their mistakes.

A few years ago a hunter decided to go out alone and check on a ladder stand he had left in the woods from the previous fall. It was September and time to prepare the stand for bow season. He parked his truck and walked the better part of a mile to the stand. Upon arrival at the stand he climbed to the top of the ladder and began pulling away limbs and vines.

The disturbance got an immediate response from a family of wasps that had nested under the seat of the stand. The stinging attack caused the hunter to release his grip and fall, breaking his leg. The break was just above the ankle and so severe that the bone protruded through skin and through the rubber boot he was wearing. Alone, bleeding, in what surely must have been extreme pain and going into shock, the man was faced with the task of getting back to his truck.

Walking or hobbling was out of the question. He crawled back to the truck on hands and knees, through palmettos, in country known for the size of its rattlesnakes. He then got in the truck and drove back to civilization.

He very nearly lost the leg due to infection but eventually made a complete recovery. An iron will to survive and a toughness most people today cannot even imagine saw him through.

One December, wildlife agents responded to a late night call from the sheriff's office requesting assistance in finding a missing hunter. The hunter was a young man who had been duck hunting earlier that day with a friend. The friend had to terminate the hunt early and leave. The missing man took his friend by boat from the blind to the boat landing and was going to return to the blind alone. He never made it back to the blind.

The empty boat was found stranded in some trees where it had lodged and ran until the outboard fuel was gone. The search started in earnest at daylight and continued for three days. Before it was over men, horses, helicopters and boats had covered every inch of terrain in a 12,000 acre area.

On the third day the young man's body was recovered from the lake. He fell from the boat only seconds after leaving the landing. No, he was not wearing a life vest. We will never know for sure what caused him to fall from the boat.

A wildlife officer and good friend who lives out west told the story of this unusual mishap. An elk hunter was successful in taking his quarry and began field dressing the animal. As anybody who has ever handled one knows, elk have very tough hide. A sharp knife is required for the chore of dressing and quartering.

The excited hunter rolled the elk onto it's back and straddled the animal to open the abdomen. He inserted the knife and began pulling towards himself in an effort to slit the skin. He must have been pulling very hard on a dull knife when it slipped free of the skin and plunged into the man's groin, severing a major artery. The man went a few steps, collapsed and bled to death.

Accidents happen fast and always at the worst possible place and time. But proper planning and precautions can prevent many accidents or at least minimize the damage or threat to life.

If at all possible, avoid going out alone. Odds for survival are nearly doubled when two or more people are together in a bad situation. In the event of injury your partner can provide first aid and go for help.

First, never leave on any trip without telling someone where you are going. Once in the field do not change your mind and go to a different location, particularly if you are alone. If something happens, search time can be reduced from days to minutes if we know where to look. If you have a cellular phone, bring it along.

Next, always wear a personal flotation device (PFD) or life vest when a boat is under way. Hunters who travel by boat in cold weather are typically wearing heavy clothing and waders. The weight, restriction of motion and shock of cold water entry mean almost certain death to anyone without a PFD. If you do go in the water, get out as quickly as possible, get to shelter and get into dry clothes. It is a good idea to carry dry clothing in a waterproof compartment in the fall and winter.

Finally, use extreme caution when handling firearms, arrows, knives, climbing stands and any other gear that has the potential to injure you or someone else. Work slowly and carefully when using such equipment. After the shot wait until the excitement has passed and allow yourself some time to settle down before climbing from an elevated stand and before field dressing game. Avoid using equipment which is not in good condition. What grandpa told you about a dull knife cutting you quicker than a sharp one is absolutely true.

Hunting season should be a time for fun and excitement anticipated with great delight. It should not be a time to remember tragedy or the loss of a loved due to a needless accident. Carefully plan each outing and be sure to bring emergency equipment and a first aid kit.

Meeting hunters on brisk fall mornings to hear a good hunting story is much preferred to meeting at dusk to form a search party.

Loranger Taxidermist Wins Secretary's Cup

Gerald Flynn's mount of an eastern wild turkey was recognized as winner of the 1995 Secretary's Cup for taxidermy art.

Flynn has been a part-time taxidermist for more than 30 years and full-time since 1982. His winning exhibit of a turkey gobbler perched on a pine tree limb is the first turkey he has ever entered for competition. Besides winning the Secretary's Cup, Flynn's work won second prize in the National Taxidermy Association competition and won Best of Category and Best of Show from the Louisiana Taxidermy Association as the best artwork of their 1996 competition.

The Secretary's Cup competition was developed by officials of the Department of Wildlife and Fisheries and the Louisiana Taxidermy Association to promote the art of taxidermy. The winning mounts are donated to the Department for permanent display at 2000 Quail Drive in Baton Rouge.

Winners Announced in Student Journalism Contest

The Louisiana Outdoors Writers Association announced the three winners of its Student Journalism Contest at the monthly meeting of the Louisiana Wildlife and Fisheries Commission in September 1996.

Each youngster won a Louisiana lifetime hunting/fishing license. The 1995-96 awards were presented at the LOWA mid-year conference at Toledo Bend, Aug. 9-11.

Writing selections were judged in two categories, grades 7-9 and grades 10-12. Photographs were judged in one category, grades 7-12.

First place winner in the 7-9th grade category was Greg Plaisance of Baton Rouge. Greg's award was sponsored by Louisiana Wildlife Federation and was bestowed for his story about a fishing and duck hunting excursion with his father.

Mitch Albritton of Ruston was the first place winner in the 10-12th grade category. Thomas Marine of Gonzales sponsored the award for Mitch's winning entry, which was an untitled story about a deer hunt.

Fourteen year old John Ruth of Baton Rouge was the first place winner in the photography category. John's award was sponsored by the Louisiana Chapter of Safari Club International and took first prize for his photograph entitled "Saying Good-bye to the Fishing Hole."

Photo and writing submissions will be accepted through March 1, 1997, for the 1996-97 competition. Any Louisiana school student in grades 7-12 is eligible to enter except immediate family members of LOWA members.

For more information and complete rules, call Bill Ford at 504/344-6707, or write Joey Sedtall, LOWA Student Journalism Contest, 23208 Garden Drive, Covington, LA 70433,

Dec. 7 is Youth Waterfowl Hunting Day

Adult hunters looking for an opportunity to introduce youngsters to outdoor sports, ethics and safety should take advantage of youth waterfowl hunting day Dec. 7, 1996. This day, set under U.S. Fish and Wildlife Service guidelines, is designed to provide young people 15 years of age or younger a day to experience a day afield.

Managers of the Department of Wildlife and Fisheries, the sponsoring agency in charge of the hunts, is encouraging all adult hunters to take a youth hunting and give them the experience of a longstanding Louisiana tradition.

Youth hunters must be 15 years of age or younger and must be accompanied by an adult at least 18 years of age. Adults may not hunt.

All regular season bag and possession limits apply.

Two Wildlife Areas Preserved For Posterity

Two areas, including Louisiana's first urban wildlife refuge, now have permanent rules established for public recreation.

The Wildlife and Fisheries Commission ratified regulations for visitors to the 237-acre Waddill Wildlife Refuge in Baton Rouge and the 3,921-acre Timken Wildlife Management Area in St. Charles Parish.

Waddill Refuge, adjacent to the Comite River, was donated to LDWF in 1941. It was used for many years by the Baton Rouge City Police for youth and other activities. LDWF is turning the property into a recreation and education complex, complete with trails and a nature center.

Timken WMA is owned by the Orleans City Park Improvement Association and is being leased to LDWF. Close proximity to New Orleans, Lafitte and Des Allemands is sure to make it popular with hunters and wildlife watchers alike.

For a summary of rules and regulations contact James Manning, Fur and Refuge Division, Department of Wildlife and Fisheries, P.O. Box 98000, Baton Rouge LA, 70898-9000.

Managing White-Tails Book Primer for Deer Season

Managing White-Tails in Louisiana is a 95-page, full color, spiral-bound book printed in a large-print format. It was published in response to increased interest in the Louisiana deer population and to provide more in-depth information concerning deer management in Louisiana.

Managing White-Tails in Louisiana is available for $5.20 ($5.40 for East Baton Rouge Parish residents) at the *Louisiana Conservationist* office, 2000 Quail Drive, Baton Rouge. Mail orders are acceptable, but a postage charge of $1.50 for the first book should be included, with 50 cents for each additional book. Visa and MasterCard orders are accepted, with the expiration date and a signature.

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TWO MORE GREAT CHRISTMAS GIFTS

Bayou Kitchen

Photo courtesy of Louisiana Seafood Promotion & Marketing Board

Oysters with Sauteed Spinach & Mushrooms and Garlic Pimento Sauce

- 4 ounces cold water
- 4 1/2 teaspoons lemon juice
- 4 1/2 teaspoons flour
- 3 tablespoon pimentos, diced
- 1/2 teaspoon paprika
- 1 tablespoon garlic
- 10 ounces butter, softened (sauce)
- 1 tablespoon butter
- 1 cup sliced mushrooms
- 1 pound fresh spinach, washed and stems removed
- 30 fresh Louisiana medium oysters
- 2 cups flour
- 2 teaspoons salt
- 1/2 teaspoon white pepper
- 1/4 teaspoon cayenne pepper
- 2 eggs
- 2 cups milk
- 4 cups bread crumbs

To prepare sauce, place water, lemon juice, flour, pimentos, paprika and garlic in medium saucepan over medium heat, stirring constantly, until thickened.

Remove from heat and whip in butter, a little at a time. Blend in food processor or blender. Place in stainless steel bowl sitting in hot water to keep warm.

Saute mushrooms in butter until soft. Add spinach and saute 30 seconds, just enough to wilt the spinach. Remove from pan, drain and keep warm.

Season flour with salt, cayenne and white pepper. Prepare an egg wash beating together eggs and milk. Dredge oysters in flour, dip in egg wash and then in bread crumbs. Deep fry in peanut oil at 375 degrees until crisp.

To serve, divide spinach and mushrooms equally onto 6 plates. Place 5 oysters on the bed of spinach and mushrooms and top with approximately 2 to 2 1/2 ounces of sauce. Serves 6.

Artichoke Soup with Oysters

- 1 onion, chopped
- 1/4 stalk celery, chopped
- 1/4 pound margarine
- Italian crushed red pepper
- 2 bay leaves
- 3 tablespoons flour
- 3 stalks green onions
- 1/3 cup white wine
- 1/3 cup Worcestershire sauce
- 7 beef cubes
- 1 (16 ounce) can artichoke hearts, quartered
- poached Louisiana oysters, 3 or 4 per serving

Saute chopped onions and celery with margarine in a 5 quart soup pot. Add crushed red pepper and bay leaves.

Saute until vegetables are transparent. Add flour and stir in well. Add 1 quarts water and bring to a boil. Add chopped green onions, white wine, Worcestershire sauce and beef cubes.

Return soup to a boil and add artichokes. Return to a boil and remove from heat. To serve soup, add 3 or 4 poached oysters per serving. Serves 6 to 8

Drago's Famous Charbroiled Oysters

- raw open oysters on the half shell (large)
- 1/2 black pepper
- 1 pound. butter or margarine
- 2 tablespoons chopped garlic
- grated parmesan and romano cheeses
- chopped parsley

Mix black pepper, butter or margarine and garlic to taste.

Baste oysters on the half shell on the grill with pepper, butter, garlic mixture. Sprinkle cheeses over oysters. When oysters puff and layers or ridges become obvious, oysters are ready. Sprinkle parsley on top and serve.

Recipes courtesy of Chef Tom Weaver, Christian's Restaurant; Chef Goffredo Fraccaro, La Riviera Restaurant; and Drago's Restaurant.